GROUP 00

GENERAL

CONTENTS

HOW TO USE THIS MANUAL. 00-2

TARGETS OF DEVELOPMENT 00-2

TECHNICAL FEATURES. 00-2

- EXTERIOR 00-2
- INTERIOR. 00-3
- SPACIOUS CABIN 00-4
- ENGINE 00-4
- TRANSAXLE. 00-5
- SUSPENSION. 00-9
- ACTIVE SAFETY. 00-10
- PASSIVE SAFETY 00-12
- ENVIRONMENTAL PROTECTION. 00-13
- SERVICEABILITY AND RELIABILITY 00-14

VEHICLE IDENTIFICATION NUMBER LOCATION 00-15

GENERAL DATA AND SPECIFICATIONS 00-17

HOW TO USE THIS MANUAL

M2000029000383

ABBREVIATIONS

The following abbreviations are used in this manual for classification of model types.

MFI: Indicates multiport fuel injection, or engines equipped with multiport fuel injection.

M/T: Indicates manual transaxle, or models equipped with manual transaxle.

A/T: Indicates automatic transaxle, or models equipped with automatic transaxle.

2.4L engine: 2.4 liter <4G69> engine, or a model equipped with this engine.

3.8L engine: 3.8 liter <6G75> engine, or a model equipped with this engine.

TARGETS OF DEVELOPMENT

M2000004000739

- Dynamic, vigorous, and sexy exterior
- High-level balanced performance integrating "Fast", "Agile" and "Stops".
- Advanced air bags, side air bags, and curtain air bags have been installed as standard equipment.
- Rockford 650-W high-performance audio unit has been introduced as an option.

TECHNICAL FEATURES

EXTERIOR

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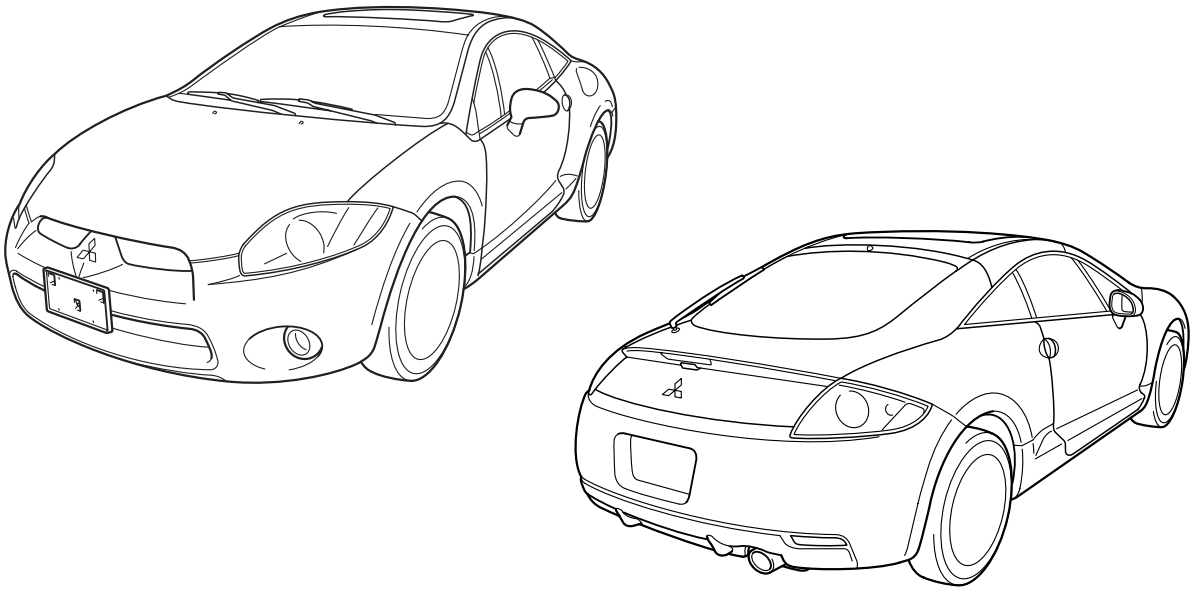

AC406197

DESIGN FEATURES

Front view

- Aerodynamic front bumper.
- Radiator grille integrated front bumper.
- Bigger, richer looking headlights.
- Engine room under covers with air dam skirt panels.

Side view

- Side air dams.
- Electric remote-controlled door mirrors.
- Heated door mirrors (Vehicles for Canada).

Rear view

- High-mounted stoplight integrated liftgate spoiler.
- Aerodynamic rear bumper.

INTERIOR

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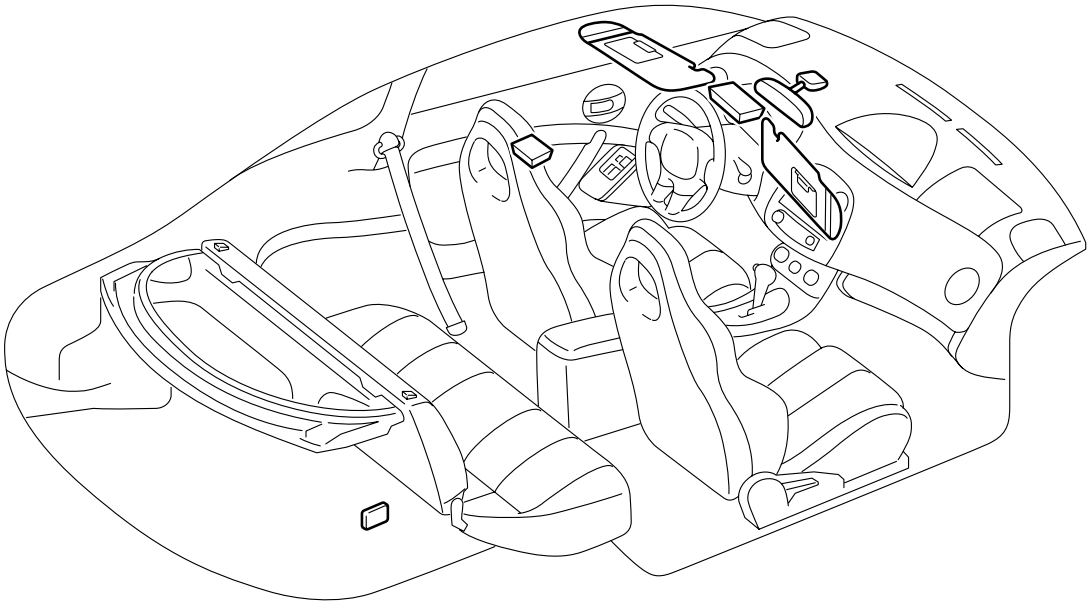

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DESIGN FEATURES

Instrument panel
- Arch-shaped instrument panel pad.
- Silver coating for sporty feeling.
- Instrument panel has been modified for a clean and neat impression.

Center panel/Combination meter
- The night illumination color is ice blue.

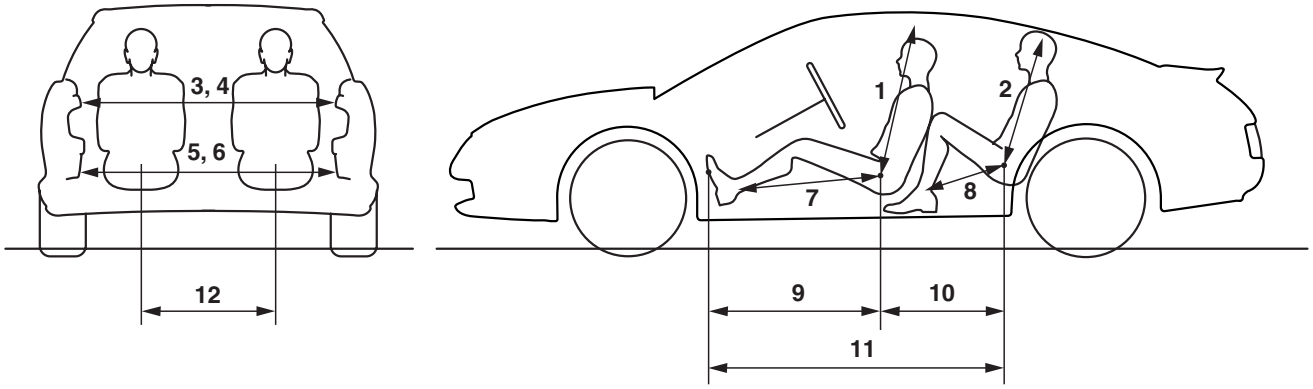
Floor console
- The floor console storage capacity is increased.
- A light above the HVAC panel illuminates around the floor console.
- The arm rest can be opened and closed from the driver's side.

Door
- Large door grip with solid look.
- High-grade accent panel fully painted in silver.
- Reflector at the rear end of the door trim to improve safety when a door is opened.

Seat
- Variable hardness pad has been installed to the sporty-look high back seat to improve holding performance.<Front seat>

SPACIOUS CABIN

M2000000400092



AC406416 AB

NO.	ITEM		DIMENSION	NO.	ITEM		DIMENSION
1	Head room mm (in)	Front	979 (38.5) 952* (37.5*)	7	Leg room mm (in)	Front	1,088 (42.8)
2		Rear	878 (34.6)	8		Rear	741 (29.2)
3	Shoulder room mm (in)	Front	1,377 (54.2)	9	Front hip point couple mm (in)		734 (28.9)
4		Rear	1,300 (51.2)	10	Brake pedal mm (in)		960 (37.8)
5	Hip room mm (in)	Front	1,363 (53.7)	11	Hip point couple mm (in)		665 (26.2)
6		Rear	1,127 (44.4)	12	Total leg room mm (in)		1,625 (64.0)

NOTE:

- **: Vehicle with sunroof.*
- *Refer to P.00-17 for the body dimensions.*

ENGINE

M2000020000375

2.4-L 16-VALVE SOHC ENGINE

The 4G69 2.4-liter engine is available with MFI. The engine employs Mitsubishi Innovative Valve timing and lift Electronic Control (MIVEC).

MAJOR SPECIFICATIONS

ITEMS	SPECIFICATIONS
Total displacement cm^3 (cu in)	2,378 (145.1)
Bore × Stroke mm (in)	87.0 (3.42) × 100.0 (3.94)
Compression ratio	9.5
Combustion chamber	Pentroof type
Camshaft arrangement	SOHC
Maximum output kW/r/min (HP/r/min)	121/6,000(162/6,000)
Maximum torque N·m/r/min (lbs-ft/r/min)	220/4,000(162/4,000)
Fuel system	Electronic-controlled multiport fuel injection
Ignition system	Electronic-controlled 4-coil

TSB Revision

3.8-L 24-VALVE SOHC ENGINE

The 6G75 3.8-liter engine is available with MFI. The engine employs Mitsubishi Innovative Valve timing and lift Electronic Control (MIVEC).

MAJOR SPECIFICATIONS

ITEMS	SPECIFICATIONS
Total displacement cm^3 (cu in)	3,828 (233.6)
Bore × Stroke mm (in)	95.0 (3.74) × 90.0 (3.54)
Compression ratio	10.5
Combustion chamber	Pentroof type
Camshaft arrangement	SOHC
Maximum output kW/r/min (HP/r/min)	194/5,750(263/5,750)
Maximum torque N·m/r/min (lbs-ft/r/min)	353/4,500(260/4,500)
Lash adjuster	Exhaust side only
Fuel system	Electronic-controlled multiport fuel injection
Ignition system	Electronic-controlled 6-coil

TRANSAXLE

M2000021000356

<2.4L ENGINE>

Has 5-speed manual transaxle or INVECS-II sports mode 4-speed automatic transaxle.

<3.8L ENGINE>

Has 6-speed manual transaxle or INVECS-II sports mode 5-speed automatic transaxle.

SPECIFICATIONS

<MANUAL TRANSAXLE>

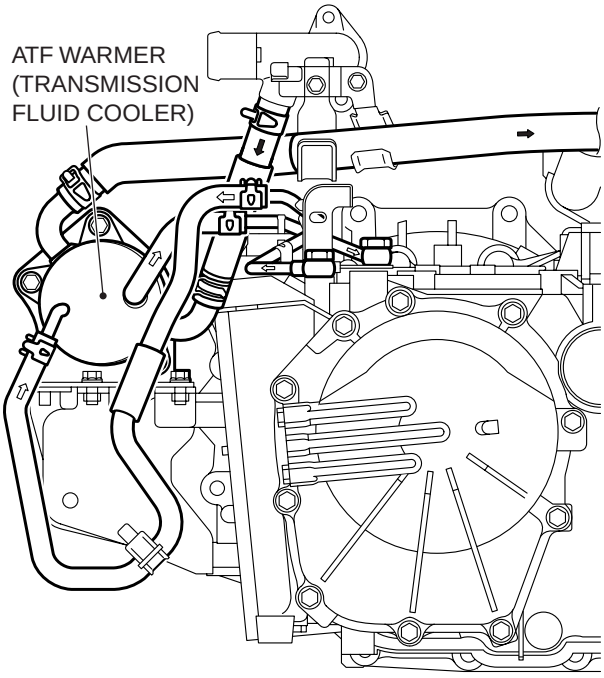
ITEM		SPECIFICATION	
Transaxle model		F5M42	F6MBA
Engine model		2.4L engine	3.8L engine
Transaxle type		5-speed forward, 1-speed reverse constant mesh	6-speed forward, 1-speed reverse constant mesh
Transaxle gear ratio	1st	3.583	3.214
	2nd	1.947	2.238
	3rd	1.379	1.535
	4th	1.030	1.171
	5th	0.767	1.085
	6th	–	0.790
	Reverse	3.363	3.456
Final reduction ratio		4.312	3.777 (1st, 2nd, 3rd, 4th)
			3.238 (5th, 6th, Reverse)
Speedometer gear ratio		28/36	25/33

<AUTMATIC TRANSAXLE>

ITEM		SPECIFICATION	
Transaxle model		F4A4B-4-L3Z	F5A5A-4-C1Z
Engine		2.4L engine	3.8L engine
Torque converter	Type	3-element, 1-stage, 2-phase type	
	Lock-up	Provided	
	Stall torque ratio	1.9	1.7
	Application	3rd, 4th	4th, 5th
Transaxle type		4 forward speeds, 1 reverse speed, fully automatic	5 forward speeds, 1 reverse speed, fully automatic
Transaxle gear ratio	1st	2.842	3.789
	2nd	1.573	2.162
	3rd	1.000	1.421
	4th	0.688	1.000
	5th	–	0.686
	Reverse	2.214	3.117
Final reduction ratio (Differential gear ratio)		4.212	3.325
Clutch		Multi-disc type 3 sets	Multi-disc type 4 sets
Brake		Multi-disc type 2 sets	Multi-disc type 2 sets, band type 1 set
Manual control system		P-R-N-D (4 position) + Sport mode (up, down)	
Shift pattern control		Electronic control (INVECS - II)	
Hydraulic control during shifting		Electronic control (Each clutch hydraulically independently controlled)	
Torque converter clutch control		Electronic control	

TRANSMISSION FLUID COOLER

<2.4L ENGINE> ATF WARMER (TRANSMISSION FLUID COOLER)



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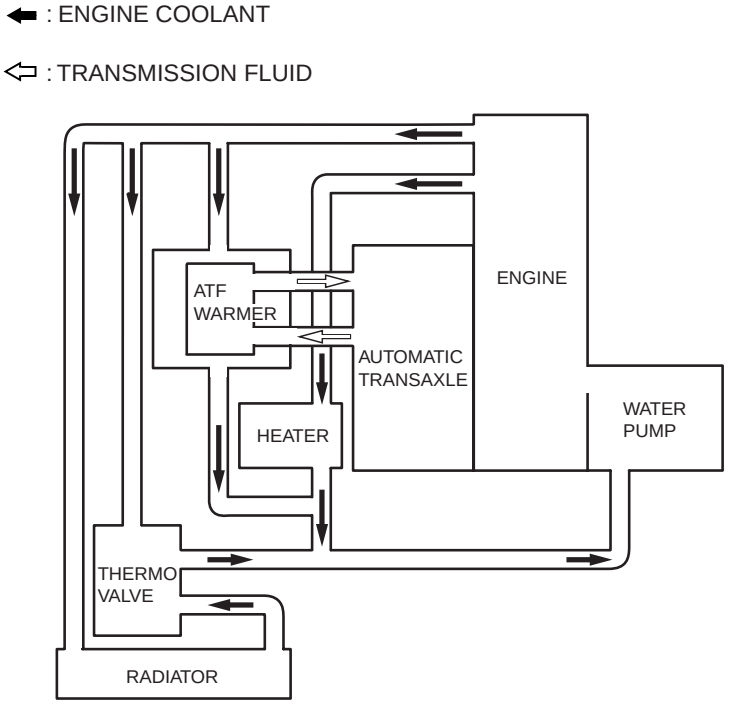

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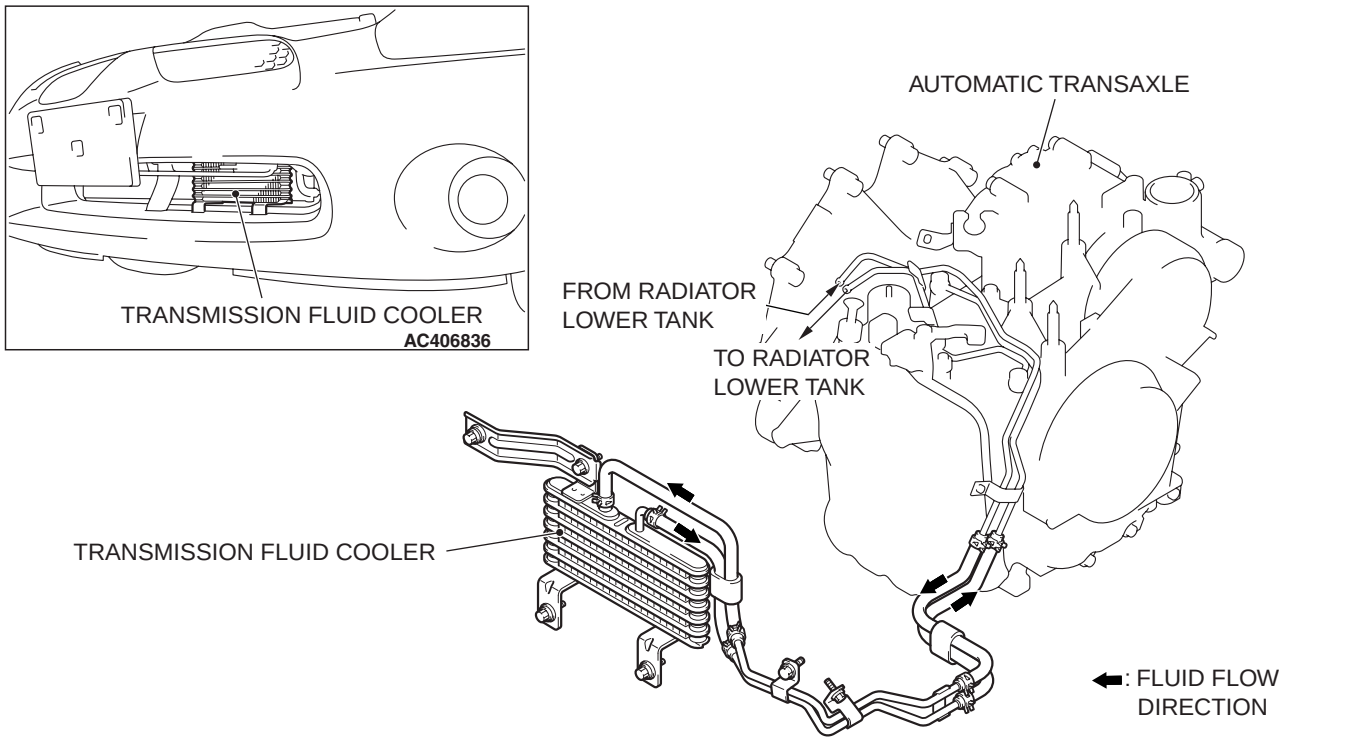
For the F4A4B transaxle on vehicles with 2.4L engine, an ATF warmer is used instead of the conventional transmission fluid cooler. The ATF warmer is integrated in the lower radiator tank.

<3.8L ENGINE> TRANSMISSION FLUID COOLER



An air-cooled fluid cooler improves the cooling effect together with the water-cooler fluid cooler incorporated into the radiator lower tank.

SUSPENSION

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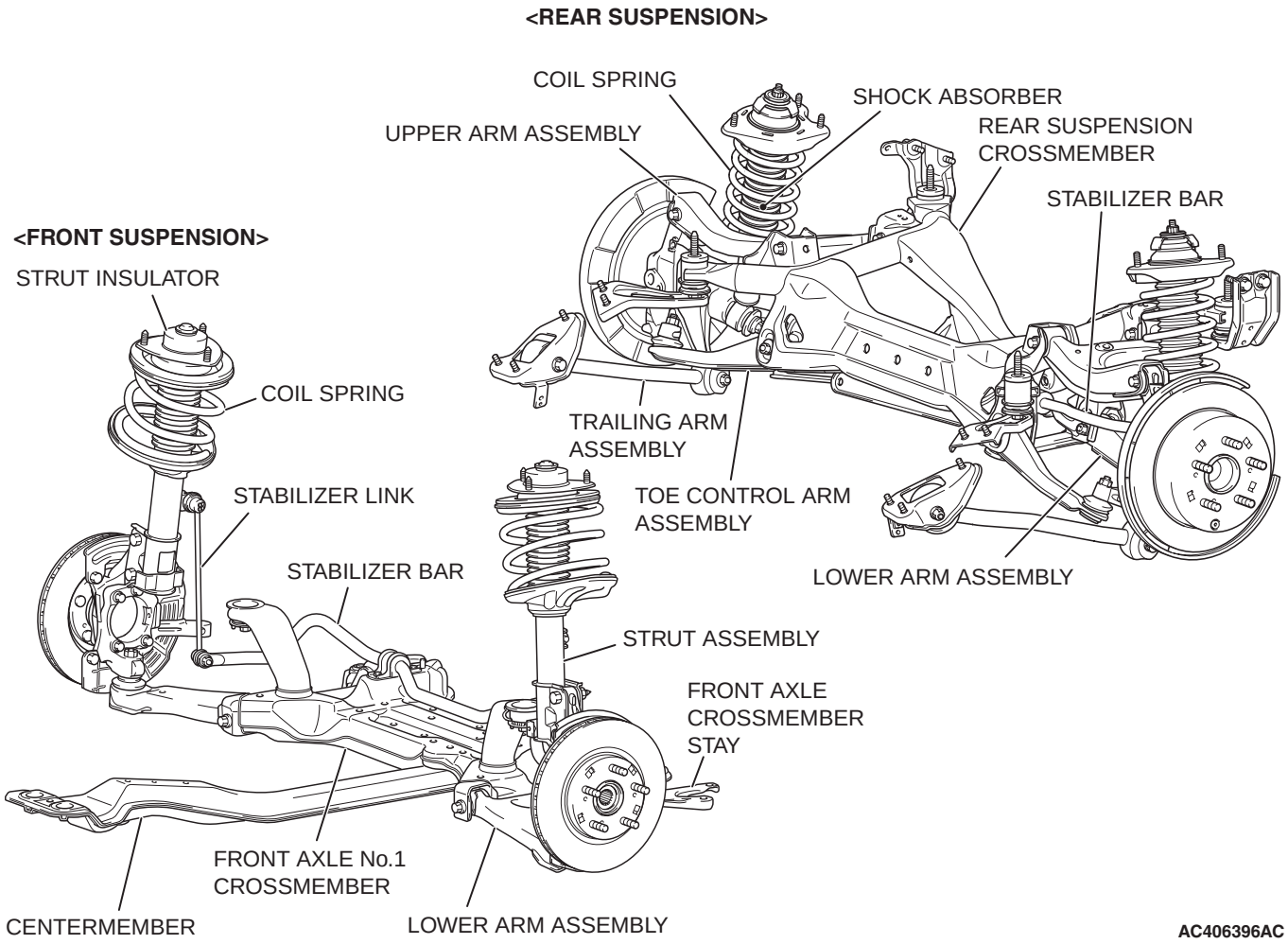

A MacPherson strut suspension system is used, the leading type for passenger vehicles. This makes it as light as other passenger vehicles in its class, and the coil springs ensure greater handling stability. The crossmember, with a structure supporting elasticity, also improves noise control.

Low-mount multilink independent suspension offers handling stability and riding comfort. Crossmembers with an elastic structure reduce road noise, making the vehicle quieter.

ACTIVE SAFETY

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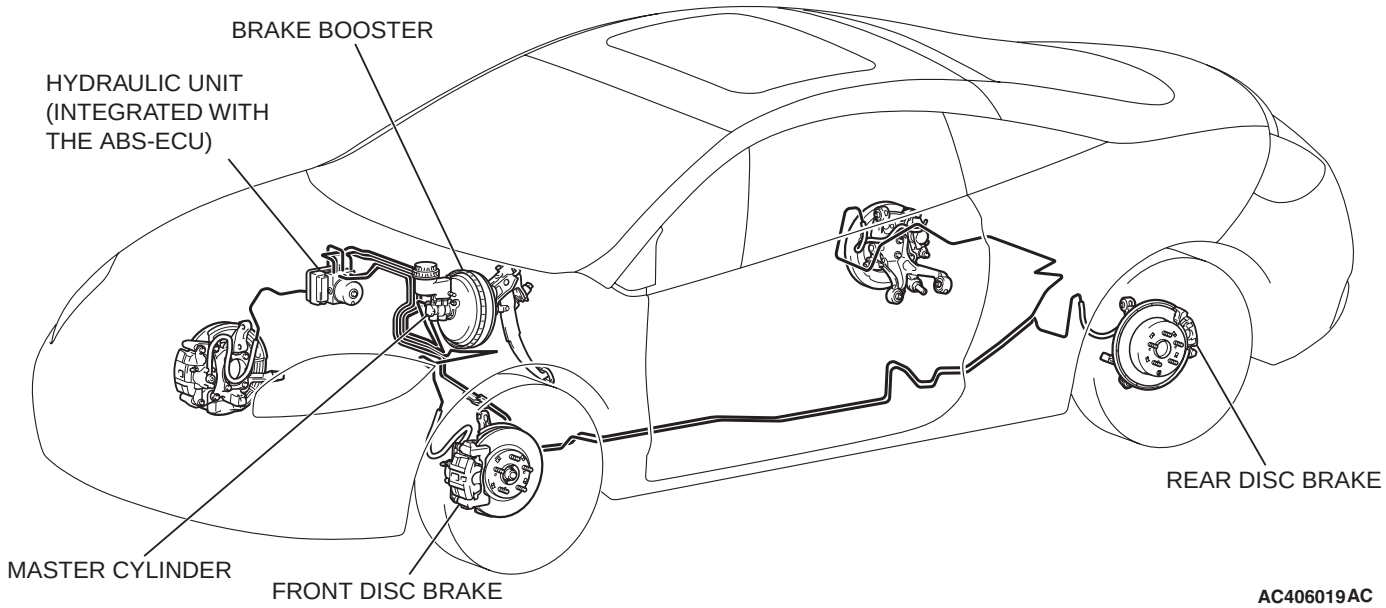
BRAKING SYSTEM



2.4L engine models come with 16-inch ventilated disc front brakes, and 14-inch solid discs rear brakes. 3.8L engine models come with 16-inch ventilated disc front brakes, and 15-inch ventilated disc rear brakes.

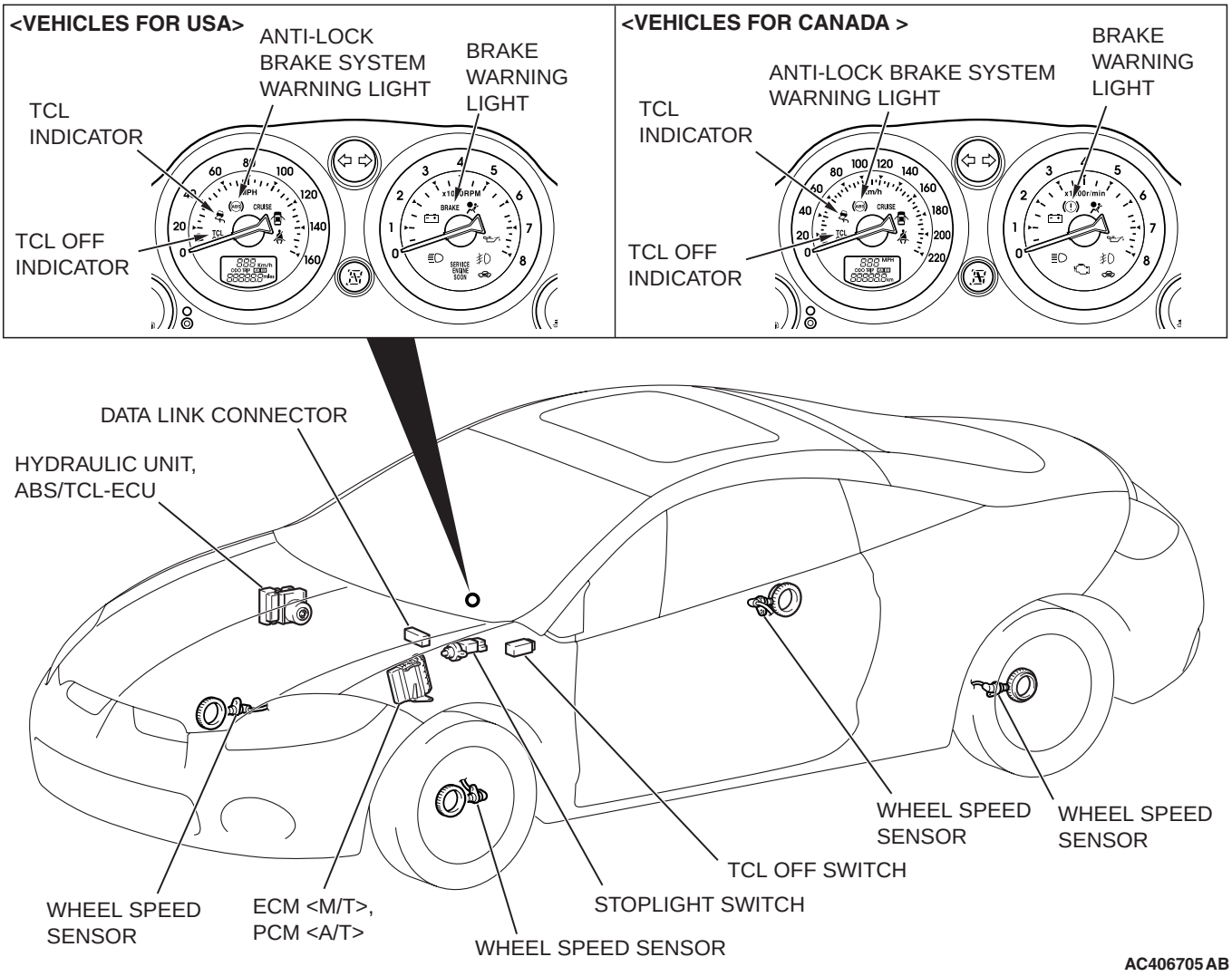
A 4-sensor, 4-channel Anti-lock Braking System (ABS) with Electronic Brake-force Distribution (EBD) is available.

TRACTION CONTROL SYSTEM (TCL)

The TCL controls engine output to prevent the wheelspin of the drive wheels (front wheels) for improved standstill acceleration and stability.

In general, the driver adjusts pedal depression to control engine output. When excessive pedal depression causes the drive wheels (front wheels) to spin, the TCL applies braking force to the slipping drive wheel or lowers the engine output to suppress the drive wheel slippage.

CONSTRUCTION DIAGRAM



TSB Revision

PASSIVE SAFETY

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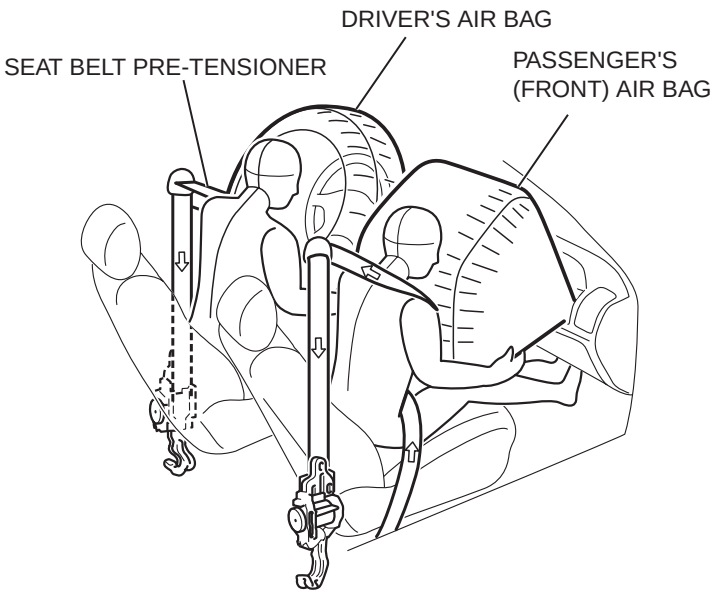
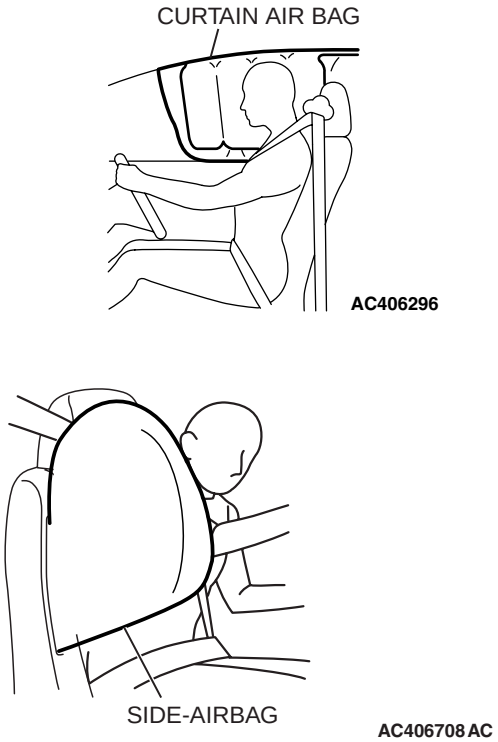
SRS AIR BAGS

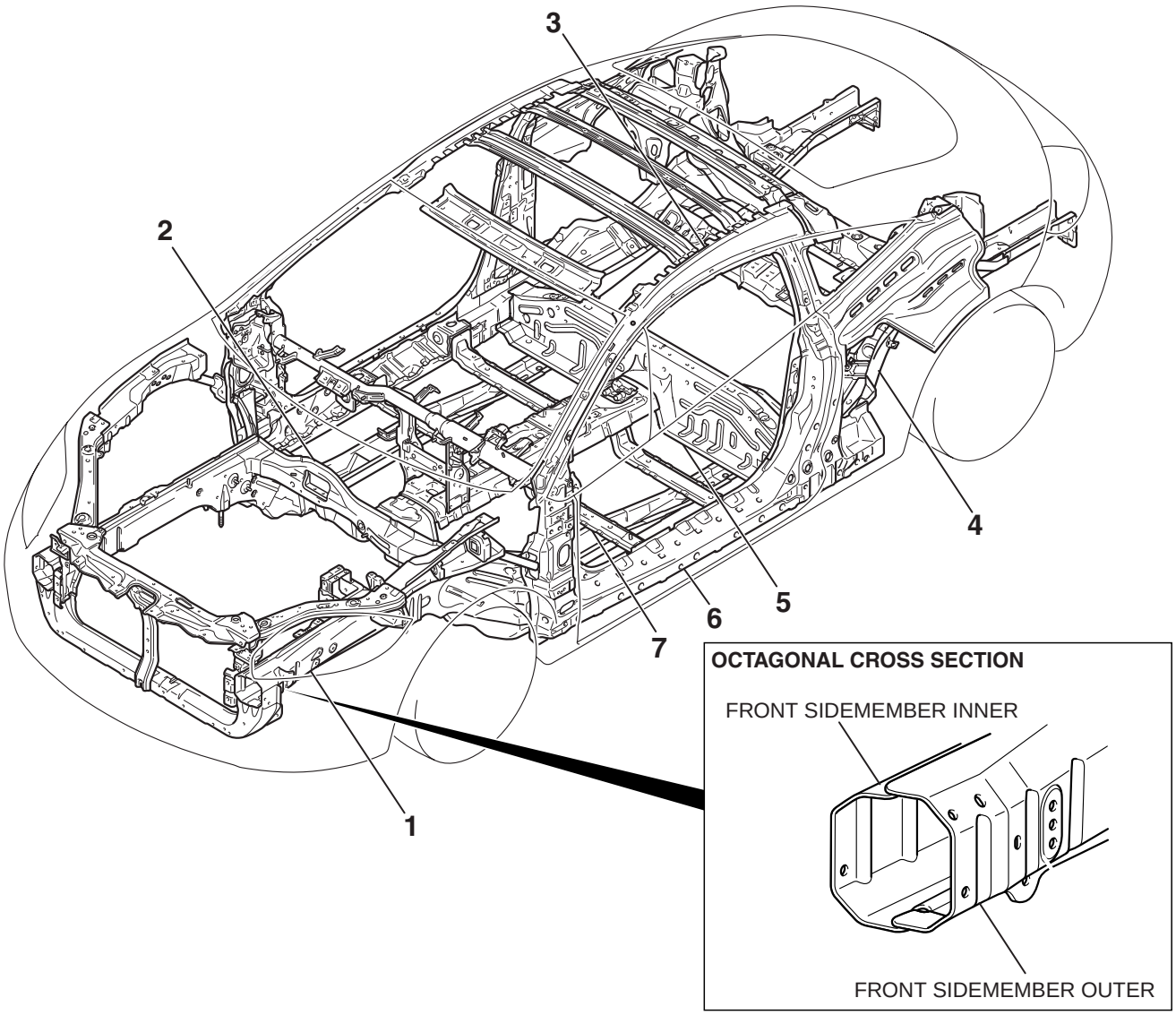




Dual Supplemental Restraint System (SRS) front air bags deploy only upon detection of frontal impact.
For the passenger and driver seat air bags, an advanced air bag system optimally controls the inflation sizes of the air bags in two steps in accordance with collision level and driver/passenger information detected.
When used in combination with the 3-point ELR seat belts, they significantly reduce head and upper torso injury to front-seat occupants.

The seat belts with pre-tensioner work simultaneously with the SRS. The pre-tensioner takes up seat slack immediately when a collision takes place by restraining the front passengers sooner than the SRS. This prevents the passengers from moving forward.
In the case of side impact, the air bags concealed at the sides of the front seats instantly inflate. The side-airbags soften blows to the front passengers.
Whether the pre-tensioner is activated or deactivated depends on the use of the seat belt.
The curtain air bag systems are activated when a side impact exceeds criteria, to protect the heads of the occupants in the front and rear seats.

BODY CONSTRUCTION



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The Eclipse has a high-energy-absorbing front and rear sidemember structure and high rigidity structure combination.

1. Front sidemember is straighter and has octagonal cross sections.
2. Dash crossmember is used.
3. High rigidity side outer reinforcement is used.
4. Rear floor sidemember is straighter and larger.
5. High rigidity rear seat crossmember front.
6. High rigidity side sill outer reinforcement inner.
7. High rigidity front floor crossmember front.

ENVIRONMENTAL PROTECTION

Mitsubishi has given careful consideration to protection of natural resources and the environment in the vehicle. Environmentally friendly features are:

OTHER SAFETY FEATURES

- 3-point ELR seat belts
- Front fog lights <Sports>
- Child restraint fitting

M2000027000321

ITEMS DEALING WITH ENVIRONMENTAL PROTECTION

PREVENTION OF ATMOSPHERIC POLLUTION	USEDON	MAIN QUALITIES
HC emission reduction	Fuel hoses (Engine side)	Low evaporative emission materials
Extending life	Automatic transmission fluid	Fill for life
Recycling	Plastic parts	Easy to recycling
	Bumper fascia, scuff plate, etc.	Material recycled in-plant.
	Air intake hose	Thermoplastics for easy to recycling
Reduction of hazardous substances	ED coating	Lead-free type coatings.

SERVICEABILITY AND RELIABILITY

M2000028000368

MUT-III (MULTI-USE TESTER-III)

The MUT-III has enhanced functions: the following

1. Interactive Error Diagnosis
   - In response to the nature of the problem, the corresponding troubleshooting page from the maintenance manual is retrieved.
   - Service data is displayed, and from the actuator test screen, the page of the maintenance manual is retrieved for a list of inspection reference values.
2. Service Manual Viewer
   - The new model guide and maintenance manual can be displayed on a personal computer monitor.
3. CAN* bus diagnostics
   - Auto diagnosis function for the CAN communications bus line.

*NOTE: *CAN: Controller Area Network (for further details, refer to GROUP 54C P.54C-2).*

ENHANCED DIAGNOSIS SYSTEM

Diagnosis functions have been included for the following systems, so that it is possible to use the scan tool to read the diagnosis codes and service data and to carry out actuator tests. In addition, it is possible to read the diagnosis codes by the flashing of the warning light in some systems.

- PCM
- ECM
- ABS
- TCL
- Automatic A/C
- ETACS
- Combination meter
- SRS

VEHICLE IDENTIFICATION NUMBER LOCATION

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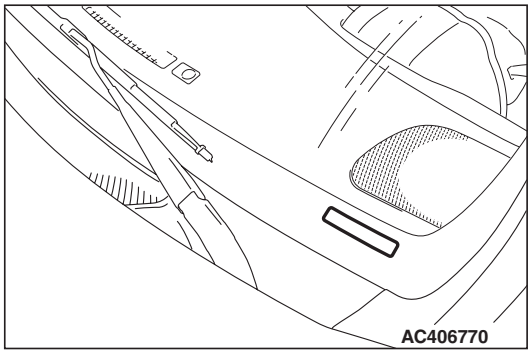
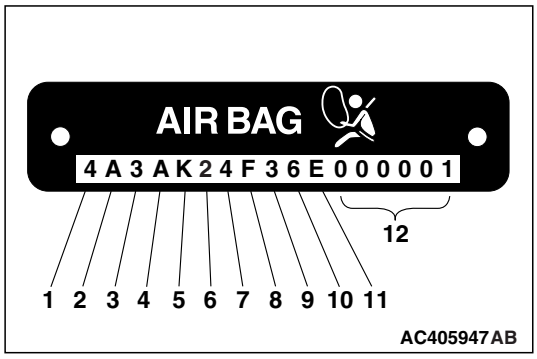


The vehicle identification number (VIN) is located on a plate attached to the left top side of the instrument panel.



VEHICLE IDENTIFICATION CODE CHART PLATE

Vehicle identification numbers contain 17 digits. The vehicle number is a code which tells country, make, vehicle type, etc.

NO.	ITEM	CONTENT
1	Country	4: USA
2	Make	A: Mitsubishi
3	Vehicle type	3: Passenger car
4	Others	A: Driver and passenger air bags
5	Line	K: ECLIPSE
6	Price class	2: Low
		3: Medium
7	Body	4: 3-door hatchback
8	Engine	F: 2.4L (4G69) MIVEC
		T: 3.8L (6G75) MIVEC
9	Check digits*	0, 1, 2, 3, ----------9, X
10	Model year	6: 2006 year
11	Plant	E: Mitsubishi Motors North America, Inc.
12	Serial number	000001 to 999999

*NOTE: *: Check digit means a single number, or letter X, used to verify the accuracy of transcription of vehicle identification number.*

VEHICLE IDENTIFICATION NUMBER LIST

VEHICLES FOR USA

VEHICLES FOR FEDERAL EMISSION REGULATION

VIN (EXCEPT SEQUENCE NUMBER)	BRAND	ENGINE DISPLACEMENT	MODEL CODE
4A3AK24F_6E	MITSUBISHI ECLIPSE	2.4L	DK2AMNHYL4M
			DK2AMRHYL4M
4A3AK34T_6E		3.8L	DK4AMJXYL4M
			DK4AMYXYL4M

VEHICLES FOR CALIFORNIA EMISSION REGULATION

VIN (EXCEPT SEQUENCE NUMBER)	BRAND	ENGINE DISPLACEMENT	MODEL CODE
4A3AK24F_6E	MITSUBISHI ECLIPSE	2.4L	DK2AMNHYL9M
			DK2AMRHYL9M
4A3AK34T_6E		3.8L	DK4AMJXYL4M*
			DK4AMYXYL4M*

*NOTE: The items marked with * are the same as Federal emission regulation.*

VEHICLES FOR CANADA

VIN (EXCEPT SEQUENCE NUMBER)	BRAND	ENGINE DISPLACEMENT	MODEL CODE
4A3AK24F_6E	MITSUBISHI ECLIPSE	2.4L	DK2AMNHYL5M
			DK2AMRHYL5M
4A3AK34T_6E		3.8L	DK4AMJXYL5M
			DK4AMYXYL5M

GENERAL DATA AND SPECIFICATIONS

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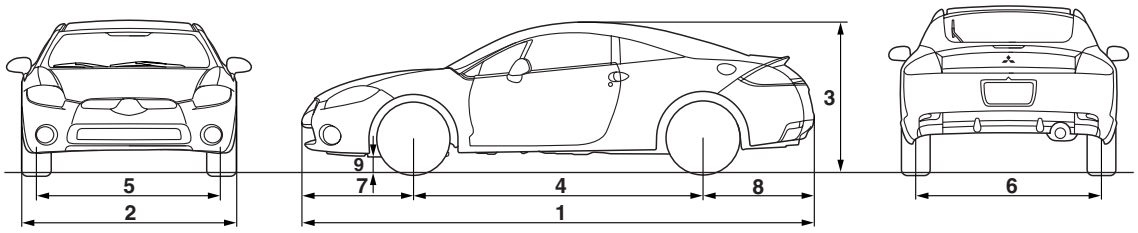
GENERAL SPECIFICATIONS



AC406418 AB

<2.4L ENGINE>

ITEM			DK2AMNHYL4M/9M/5M	DK2AMRHYL4M/9M/5M
Vehicle dimension mm (in)	Overall length	1	4,565 (179.7)	4,565 (179.7)
	Overall width	2	1,835 (72.2)	1,835 (72.2)
	Overall height (unladen)	3	1,358 (53.5)	1,358 (53.5)
	Wheelbase	4	2,575 (101.4)	2,575 (101.4)
	Tread-front	5	1,570 (61.8)	1,570 (61.8)
	Tread-rear	6	1,570 (61.8)	1,570 (61.8)
	Overhang-front	7	1,007 (39.6)	1,007 (39.6)
	Overhang-rear	8	983 (38.7)	983 (38.7)
	Ground clearance	9	148 (5.8)	148 (5.8)
Vehicle weight kg (lb)	Curb weight		1,485 (3,274)	1,500 (3,307)
	Gross vehicle weight rating		1,845 (4,068)	1,945 (4,068)
	Gross axle weight rating-front		1,020 (2,249)	1,020 (2,249)
	Gross axle weight rating-rear		835 (1,841)	835 (1,841)
Seating capacity			4	
Engine	Model No.		4G69	
	Piston displacement		2.4L	
Transaxle	Model No.		F5M42	F4A4B
	Type		5-speed manual	sports mode 4-speed automatic
Fuel system	Fuel supply system		Electronic controlled multiport fuel injection	

<3.8L ENGINE>

ITEM			DK4AMJXYL4M/5M	DK4AMYXYL4M/5M
Vehicle dimension mm (in)	Overall length	1	4,565 (179.7)	4,565 (179.7)
	Overall width	2	1,835 (72.2)	1,835 (72.2)
	Overall height (unladen)	3	1,358 (53.5) , 1,366 (53.8)*	1,358 (53.5), 1,366 (53.8)*
	Wheelbase	4	2,575 (101.4)	2,575 (101.4)
	Tread-front	5	1,570 (61.8)	1,570 (61.8)
	Tread-rear	6	1,570 (61.8)	1,570 (61.8)
	Overhang-front	7	1,007 (39.6)	1,007 (39.6)
	Overhang-rear	8	983 (38.7)	983 (38.7)
	Ground clearance	9	148 (5.8), 156 (6.1)*	148 (5.8), 156 (6.1)*
Vehicle weight kg (lb)	Curb weight		1,575 (3,472)	1,605 (3,538)
	Gross vehicle weight rating		1,945 (4,288)	1,945 (4,288)
	Gross axle weight rating-front		1,110 (2,447)	1,110 (2,447)
	Gross axle weight rating-rear		845 (1,863)	845 (1,863)
Seating capacity			4	
Engine	Model No.		6G75	
	Piston displacement		3.8L	
Transaxle	Model No.		F6MBA	F5A5A
	Type		6-speed manual	sports mode 5-speed automatic
Fuel system	Fuel supply system		Electronic controlled multiport fuel injection	

*NOTE: * indicates vehicles with 18-inch wheels.*